

**HUNTERS POINT SHIPYARD
RESTORATION ADVISORY BOARD**
Wednesday, August 26, 1998

DD 17

DRAFT MEETING MINUTES

**SFUND RECORDS CTR
88184032**

LOCATION: San Francisco City College
2nd Floor Lounge
1400 Evans Avenue
San Francisco, CA

PURPOSE: To provide: (1) the Community Co-chair report, (2) information on the removal of Parcel A from the National Priorities List (NPL), (3) answers to concerns regarding the human health risk assessment, (4) continued discussion on the draft final Parcel C Feasibility Study, (5) and recommendations for the next RAB meeting agenda.

These minutes summarize the items discussed during the RAB meeting; they are not a verbatim transcript. Attachment A provides the attendance list, Attachment B provides the meeting agenda and Attachment C provides the presentation handout materials.

FACILITATOR: Ryan Brooks, EFA West

I. Call to Order and Announcements

Ryan Brooks opened the meeting at 6:10 p.m. noting he would be facilitating the meeting in Doug Kern's absence. There were no proposed changes to the agenda.

Mike McClelland, BRAC Environmental Coordinator and Navy Co-Chair, made the following announcements:

- comments are due on August 31 for the Parcel C draft final Feasibility Study (FS)
- all comments have been received on the draft work plan and field sampling plan for the Parcel E Validation Study; field sampling will begin in early September.

Ray Thompkins asked that Item 4 on the agenda, the Human Health Risk Assessment discussion, be moved up on the agenda. It was agreed that this item would follow the Community Co-Chair report.

II. Community Co-Chair Report

Jill Fox urged the Navy to place signs on the trucks involved in the Parcel B soil removal to distinguish them from other trucks working at the Ferrari site outside the HPS gate. She stated that there have been problems associated with the trucks from the Ferrari site (driving off the site uncovered, working on weekends and late at night, and using neighborhood streets). Clearly marked trucks will help protect the Navy from community complaints and help the community direct complaints to the right source. Mr. Brooks confirmed that all trucks involved in the Navy's soil removal activities are marked with a white bumper sticker with a contact number on it. He added that each truck is checked before leaving the gate to ensure it has a sticker.

Dorothy Peterson asked if information regarding the trucks carrying bumper stickers was provided to the community. Mr. Brooks stated that the information went out in several ways - he went door-to-door to speak with people along Ennis Street, a fact sheet was mailed out to the Hunters Point community, a meeting was held for tenants of HPS, and an information table was set up at Zack's Rocket Café during the first week of the cleanup. Mr. Brooks noted that an update on the cleanup will go out in the next PAC mailing, as well.

Ms. Peterson stated the importance of being able to identify the Navy trucks because some other trucks are using routes through the neighborhood such as Ingles and Hudson Streets. Mr. McClelland noted that shipyard trucks are required to travel only a certain route out of Hunters Point; the route is outlined in the flyer.

Ms. Peterson expressed concern that information is not being provided to community members who are challenged by the printed word, and that the Navy needs to be more proactive in notifying the community of cleanup activities. She offered her assistance in getting the information out to the community. Erlinda Villa suggested bringing flyers to the local churches. Ms. Peterson advised the Navy to contact residents up the hill in addition to along the main roads through town. Amy Brownell, City of San Francisco, suggested that an information table be set up at Zack's Rocket Café again.

Ms. Peterson stated that the members of the Muwekma Ohlone tribe are getting more information that the shipyard is their land. She noted that it mainly affects reuse, but also has implications on the cleanup because they are requesting that cleanup be conducted to residential standards. Ms. Fox added that the tribe is challenging the City for ownership of the land, which may eventually affect cleanup. Mr. Brooks offered to meet with Ms. Peterson next week to further discuss the concern.

III. Human Health Risk Assessment

Mr. McClelland introduced Dr. Dan Stralka, a toxicologist with U.S. EPA, who came to answer questions raised about human health risk assessment at earlier RAB meetings.

Dr. Stralka noted one concern regarding the partial volatilization of DDT and daughter products during removal actions at Parcel F and their effect on the community. Dr. Stralka stated that this concern has already been taken into account in the calculations for the preliminary remediation goals (PRGs). Vapor pressure for DDT and DDE are relatively low, however the calculations take into account inhalation exposure from windblown dust. This pathway becomes a possible complete exposure route, and is calculated in the PRG tables which tables, which are used for screening sites.

Dr. Stralka explained that PRGs look at all the different pathways of exposure (airborne, in soil, in groundwater) how a person could be exposed to a chemical, and how the physical property will be used and potential exposure. The pathways of exposure are calculated to determine a level of concern for a chemical contributing to the pathways. He noted that dust exposure was taken into account in the calculations.

Mr. Thompkins asked if the tables are calculated by traditional EPA standards using high dose single exposure, or from low level cumulative effects. He pointed out concern regarding the high level of breast cancer being detected in young, African-American women from the local community. He noted particular concern with high DDT levels associated with Yosemite Slough and the link between DDT and breast cancer. Mr. Thompkins added that past practices have based risk assessments on 50 year old 50-year-old white males in an industrial scenario, and don't reflect the situation at Hunters Point.

Mr. Stralka responded that the studies for DDT are from a higher dose, but are being extrapolated down to a zero dose. He added that there are a number of safety factors in extrapolating from animals to humans because there is no human data. The toxicity information uses animal data but is extrapolated to low dose levels. Recent scientific information regarding estrogenic-like compounds are not taken into consideration, but EPA has conducted several workshops on how to perform tests and what would be appropriate tests to determine these endpoints. As the data becomes available it will be incorporated into the toxicity levels and ultimately into PRG data.

Mr. Thompkins asked if genetic variances are taken into account in calculating risk, noting that the Hunters Point community is diverse and multi-cultural. He added that trends and ethnicity should be considered in the community rather than using a national standard. Dr. Stralka responded that when EPA derives toxicity values and reaches a point of uncertainty of population variability, the assessments are designed to err on the side of safety. In addition, in extrapolation from animals to humans, a factor of ten is added to the calculations to take into account population variability.

Mr. Tompkins stated that something is acutely wrong in the community given the health effects being observed in the local population. He noted that new data needs to be considered in risk calculations calculations, as it becomes available. He added that synergistic effects also need to be considered.

Mr. Brooks asked if the windblown soil is affecting the local community. Dr. Stralka stated that this exposure is being taken into account in the PRG tables. He explained that the calculations look at

human exposure pathways on the shipyard; higher levels of exposure would be expected on the shipyard than in the community due to closer proximity to the source. Multiple chemical exposure is taken into account by adding the risks together.

Mr. Thompkins noted that the shipyard is not an isolated point, but that chemicals from the shipyard may be mixing in the neighborhood. He advocated that a realistic table be developed based on what is in the neighborhood, and what is coming off the shipyard as well as from other industry and mixing in the neighborhood.

Ms. Peterson asked why fish were not tested since people consume fish from the Bay. Dr. Stralka noted that there is a Bay-wide fish advisory, primarily due to concern about PCBs, but which also includes DDT. Mr. Thompkins noted that the fish advisory warning signs are not large enough for people to take heed.

Marie Harrison questioned further concerns about chemical exposure from windblown dust, noting health problems associated with her grandchildren when they are in the neighborhood. Charles James Heagy suggested that the problems may be from allergies, noting an especially high level of allergens due to a long rainy season.

A member of the audience asked why the PRGs were not calculated taking into account synergistic effects, and why the effects are added rather than multiplied since there are so many different chemicals on site. Dr. Stralka replied that EPA has tried to streamline the calculations to provide a frame of reference. He pointed out that the data is not available to evaluate the synergistic or antagonistic effects of chemicals and that synergy has not yet been demonstrated through research.

Ms. Fox asked whether there was any attempt to assess the actual nearby population when the human health risks were calculated for the parcels. Dr. Stralka noted that the Agency for Toxic Substances and Disease Registry (ASTDR) looked at the local population. Mr. McClelland added that ASTDR issued a report in November 1994 on the health risks to the community which may have been associated with the shipyard. Dr. Stralka noted that the cleanup involves looking at what the current situation is and what it will be in the future; ASTDR looks at whether there was a problem before the cleanup and whether cases of disease can be associated with the problem. Mr. McClelland noted that ASTDR has an office in San Francisco.

Mr. Thompkins stressed that the assessment was performed only on the HPS property and did not take into account what is in the community. He noted that the calculations are not a realistic reflection of the community and asked if it is possible for a recalculation based on the community outside of the shipyard. Dr. Stralka replied that it is complicated to try to take everything into account outside of the shipyard, noting that the best way to calculate risk is to look at human exposure on HPS, where the exposure would be highest. He added that the calculations look at chronic exposure and consider genetic variation by adding in a factor of ten.

Ms. Peterson asked again why fish are not being tested. Dr. Stralka stated that the EPA has

requested that the Navy include analysis of the fish consumption pathway. The Navy has responded that the Fish and Wildlife Service is already sampling the fish which has resulted in the Bay advisory. The Navy has also argued that it is hard to distinguish fish at Hunters Point because fish are a highly mobile species and may travel all around the Bay.

Ms. Fox asked about smaller marine animals such as mussels and shrimp that don't move around the Bay like fish do. Dr. Stralka acknowledged that EPA has also asked that the Navy sample these species. The Navy's response is that data is also being collected Bay-wide for these organisms. He noted that it is a regional concern and that the Bay is being monitored. There is a fish advisory in particular because of the types of chemicals and concentrations bio-accumulating in fish.

Ms. Peterson asked what the RAB can do. Dr. Stralka commented that evaluation of the endpoints are evaluation of the endpoints is being driven by the ecological risks. If there is no effect on the organisms in the sediments or on the fish, then the effect on the rest of the food chain is minimized. Ms. Peterson requested that the issue be revisited at a later date and to also let the RAB know if there's anything they can do regarding the concern.

IV. Removal of Parcel A from the National Priorities List (NPL)

Sheryl Lauth, U.S. EPA, discussed a proposal to remove Parcel A from the NPL. She explained that the NPL is a list put together by EPA containing the highest priority sites in the country to help focus cleanup activities. All of HPS is currently on the NPL; Parcel A is being proposed for removal but Parcels B-F would remain. She distributed copies of an EPA letter to Byron Rhett of the San Francisco Redevelopment Agency, detailing CERCLA liability issues involving transfers of federally owned property.

Ms. Lauth stated that the city of San Francisco requested that Parcel A be delisted to help market the site to developers. No cleanup is required on Parcel A so it is a good candidate for delisting. Delisting follows the process of publishing a Notice of Intention to Delete in the Federal Register, following a 30-day state approval process. A 30-day comment period comes after the notice is published. She noted that community input before the process begins would be helpful.

Ms. Lauth stated that a tentative schedule allows for public comment to run from October 20 to November 20; RAB members will be informed of when this comment period begins. Ms. Lauth introduced Jeremy Bricker; an intern with EPA, who put together the draft Notice of Intention to Delete.

Ms. Lauth noted that Dr. Stralka would discuss the lead-based paint issue associated with Parcel A. Dr. Stralka explained that a goal of the cleanup program is to eventually remove all of the parcels from the NPL and that Parcel A starts the process. He stated all of the data was reviewed to see if anything was missed. The only issue that came up from this review was the lead-based paint samples taken in the early 90's. Two of the samples - one at the water tower and one near a house - showed elevated lead levels. Both areas were resampled; high lead levels were not found at the

house, and the average concentration of lead in the soil at the water tower at a two inch depth was 300 parts per million (ppm). The PRG screening level used for lead at HPS is 220 ppm. It was determined that 300 ppm of lead in the soil wouldn't pose a problem based on the low volume of contaminated soil around the water tower. Dr. Stralka added that Housing and Urban Development (HUD) standards for residential areas use 400 ppm as a screening level and look at minimizing exposure at levels between 400 and 2,000 ppm. HUD would not suggest active remediation until levels reach between 2,000 and 5,000 ppm.

Ms. Harrison asked how the lead dissipated from around the house between the two sampling times. Dr. Stralka explained that the high reading of lead from the earlier samples may have been attributed to paint chips collected with the sample. Mr. McClelland added that there was a discrepancy between the levels found from two samples analyzed by different methods; the location was resampled and found to be at an acceptable level, and so the first sample reading was attributed to lab error.

Ms. Harrison asked if it would be expensive to remove the soil from the area. Dr. Stralka responded that it would be hard to justify the funds to remove the soil when the level is below HUD's 400 ppm standard and significantly below their 2,000 ppm standard. Ms. Brownell added that the City is comfortable with the level because most of the samples are below 220 ppm and pointed out that the redevelopment agency will remove the houses and regrade the site whichsite, which should eliminate any remaining problem.

Ms. Peterson asked if the parcel would likely get recontaminated. Dr. Stralka stated that if any contamination is discovered during redevelopment, the Navy must come back and reinvestigate. He added that the situation should be alright all right within the current systems and controls. Caroline Washington asked where the water tower is located. Dr. Stralka pointed out that it is in the northwest portion of the parcel, elevated above the large concrete building. He added that all of Parcel A has been investigated and is ready for reuse.

V. Continued Discussion on the Draft Final Parcel C FS

Kent Morey, TetraTech EMI, reviewed that all investigation work has been completed at Parcel C. The FS summarizes the information from the investigation and develops remedial technologies. He noted that the area was used primarily for ship maintenance and repair. Soil contamination includes volatile organic compounds (VOCs), heavy metals and PCBs; nearly all of the groundwater contamination is caused by VOCs...

Mr. Morey explained that the FS develops goals to achieve in the cleanup. There are two remedial action goals for groundwater:

- " identify the migration of contaminants through the soil and groundwater and into the Bay migration does not appear to be happening yet)

- " protect human health from volatiles in the air - concentrations in groundwater may enter buildings and be breathed by people inside, completing an exposure pathway
- " Specific cleanup technologies would focus on either preventing contaminants from reaching the Bay or from reaching breathing space. He indicated on a map the locations of the contaminated areas.

Charles Dacus noted that the HPS cleanup scorecard indicates the FS is in progress through Fall 1998. Mr. Morey stated that the comment period will close at the end of the month, at which point a response to comments will be provided. A draft Proposed Plan will follow, which also includes a public comment period, then a technology will be chosen.

Mr. Morey briefly reviewed some of the items on a handout (refer to Attachment C) providing the definitions of groundwater remedial alternatives and soil remedial alternatives.

Soil Remedial Alternatives

Soil Vapor Extraction (SVE): Pipes with holes are sunk into the ground; a vacuum on the end of the pipe draws air and the chemicals from the soil through the pipes like a straw. The air containing the chemicals is collected and the chemicals separated out to a container for treatment.

Solidification and Stabilization (S/S): This: This technology is used to treat heavy metals, not VOCs. The contaminated soil is mixed with a material that binds the soil and contaminants together to form a solid, concrete-like mass.

Thermal Desorption: Contaminated soil is heated to separate chemicals from the soil and move them into the air. The air containing the chemicals is then moved to another container for treatment.

Groundwater Remedial Alternatives

Mr. Moorey Morey noted that some of the technologies work better for some sites than others, depending on the specific situation.

Excavation of Saturated Affected Soil: Contaminated soils are dug up and removed. Sides of the excavation may need to be shored up with sheet piling. This technology is best used for small, isolated sites.

Groundwater Extraction, On-Site Treatment and Discharge to POTW: Extraction wells remove groundwater which groundwater, which is then pumped on an on-site location for treatment. The treated water is then discharged to the local publicly owned treatment works (POTW). This technology works well for larger areas.

Ms. Brownell noted that the Navy will have to obtain a permit from the City in order to discharge the treated water into the POTW. Mr. MooreyMorey noted that some chemicals may stick to the soil and require further action. Six-phase soil heating can be used to augment the removal of chemicals remaining in the soil.

Six-Phase Soil Heating: Electrodes are placed in the ground surrounding the affected area which heat up the soil when a voltage is applied. Steam created underground by the electrical current separates VOCs from the soil. The VOCs must be removed from the steam through another process. This is considered an emerging technology.

Additional technologies are noted in the handout, Attachment C.

Mr. McClelland Noted that a Proposed Plan, identifying a treatment technology, will be developed after the final FS. A 30-day review and comment period and a public comment meeting will follow. ; Aa Record of Decision (ROD) will be issued to complete the process.

IV. Agenda Items

The following items were identified as topics for the September meeting:

- " tour of Parcel B cleanup
- " further questions on the NPL
- " Public Utilities Commission (PUC) presentation on Yosemite Creek

Mr. Brooks adjourned the meeting at 8:02 p.m.

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The next regular RAB meeting will be held on Wednesday, September 23, 1998, at the San Francisco City College, 6:00 p.m.

ATTACHMENT A
MEETING AGENDA

**AGENDA
HUNTERS POINT SHIPYARD
RESTORATION ADVISORY BOARD**

DATE: August 26, 1998

LOCATION: SF City College
2nd Floor
1400 Evans Avenue
San Francisco

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| 6:00 | 1. Call to Order and Announcements

(Upcoming Documents and Activities) |
| 6:05 | 2. Community Co-chair Report

(An opportunity for the community Co-chairs to discuss information of interest to the RAB) |
| 6:15 | 3. Removal of Parcel A from the National Priorities List (NPL)

(EPA will make a presentation and lead a discussion on the delisting of Parcel A from the NPL) |
| 6:35 | 4. Human Health Risk Assessment

(Dr. Dan Stralka, a Toxicologist for the U.S.EPA, will talk with us about human health risk assessments for the cleanup and answer questions on the effects of some contaminants being cleaned up at HPS) |
| 7:00 | 5. Continued Discussion on the Draft Final Parcel C Feasibility Study

(We will continue the discussion of the Draft Final Parcel C FS) |
| 7:45 | 6. Recommendations for Agenda Items for next RAB meeting and future field trips/activities |
| 7:55 | 7. Adjourn |